WHAT IS CLAIMED IS:

1. A spread-spectrum filter searcher system, for finding a spreading code sequence and thereby detecting one of a plurality of path signals contained in a received multi-path spread-spectrum signal, comprising:

a partial matched filter for receiving an input of multi-path versions of a spread-spectrum signal having a spreading code sequence and an information signal, for matching of a portion of the input signal to a predetermined short segment of a reference code sequence and for generating a correlation value responsive to a degree of the matching; and

a decision circuit coupled to the partial matched filter for comparing the correlation value with a threshold to determine if the received spread-spectrum signal adequately matches the reference code

2. A spread-spectrum filter searcher system as in claim 1, further comprising a local pseudo random (PN) sequence generator, coupled to the partial matched filter, for generating the reference code sequence so as to correspond to an expected spreading code sequence and for supplying the predetermined short segment of the reference code sequence to the partial matched filter.

3. A spread-spectrum filter searcher system as in claim 1, wherein the partial matched filter comprises a tap delay line having a length smaller than a full matched filter length.

4. A spread-spectrum filter searcher system as in claim 3, wherein the partial matched filter further comprises:

a plurality of multipliers for multiplying samples of the input signal from taps of the delay line with chips of the short segment of the reference code sequence; and

an adder circuit coupled to the multipliers to sum product values output by the multipliers and thereby form the correlation value.

5. A spread-spectrum sliding matched-filter searcher system, for finding multi-path signals from a received spread-spectrum signal, comprising:

a partial matched filter for receiving an input of a spread-spectrum signal having a spreading code sequence and an information signal, for matching a portion of the input signal during each plurality of time periods to a portion of a reference code sequence and for generating a first correlation value responsive to the matching during each of the time periods;

an integrator coupled to the partial matched-filter for integrating the first correlation value over said time periods to generate a second correlation value; and

a decision circuit for comparing a first and a second correlation value with a first threshold and a second threshold, respectively, to determine if the received spread-spectrum signal adequately matches the reference code.

6. The spread-spectrum sliding matched-filter searcher system as in claim 5, wherein the portion of the reference code remains fixed relative to the received spread-spectrum signal until the first correlation value equals or exceeds the first threshold.

7. The spread-spectrum sliding matched filter searcher system as in claim 6, wherein after a predetermined number of chips, the local PN reference code sequence freezes, and the integrator resets to zero when either the second correlation value equals or exceeds the second threshold or the second correlation value does not equal or exceed the second threshold over a predetermined extended time period.

8. The spread-spectrum sliding matched-filter searcher system as in claim 5, wherein the partial matched filter comprises a tap delay line having a length smaller than a full matched filter length.

9. The spread-spectrum filter searcher system as in claim 5, wherein the decision circuit controls the integration based on the first threshold to trigger the execution of the integrator and identifies a positive search result based on the second threshold.

10. The spread-spectrum sliding matched-filter searcher system as in claim 5, further comprising:

a local pseudo random (PN) sequence generator coupled to the matched-filter for generating the reference code sequence.

11. A spread-spectrum searcher and receiver system, comprising:

a correlator, comprising:

(a) a partial matched-filter for receiving an input of a spread-spectrum signal having a spreading code sequence and an information signal, for matching the input signal over a plurality of chips to a portion of a reference code sequence and for generating a first correlation value representative of the matching of the input signal to the portion of the reference code sequence,

(b) an integrator coupled to the partial matched-filter for integrating the first correlation value over a predetermined number of time periods as the reference code and the received signal move at the same speed and the same logical direction, to generate a second correlation value, and

(c) a decision circuit for comparing the first and the second correlation values with first and second threshold values, wherein the integration commences when the first correlation value equals or exceeds the first threshold and the second correlation value does not equal or exceed the second threshold; and

at least one finger for receiving the reference code representing a phase of the input signal corresponding to a detected multi-path signal when the second correlation value equals or exceeds the second threshold identifying a positive search result.

12. The spread-spectrum filter searcher and receiver system as in claim 11, further comprising:

a local pseudo random (PN) sequence generator for generating the reference code sequence.

13. The spread-spectrum filter searcher and receiver system as in claim 11, wherein the partial matched-filter comprises a tap delay line having a length smaller than a full matched filter length.

14. The spread-spectrum filter searcher and receiver system as in claim 11, wherein the local reference code freezes and the integrator resets to zero after a predetermined number of chips when the second correlation value equals or exceeds the second threshold or the second correlation value does not equal or exceeds the second threshold over an extended time period.

15. The spread-spectrum filter searcher and receiver system as in claim 11, wherein the at least one finger comprises a plurality of fingers for correlating input signal with the received reference code each representative of a detected multi-path signal at a plurality of particular phases producing the multi-path signals.

16. The spread-spectrum filter searcher and receiver system as in claim 15, further comprising a Rake combiner for receiving and combining the outputs of the plurality of fingers.

17. A spread-spectrum sliding matched-filter searcher system, for finding a spreading code sequence in a multi-path signal from a received spread-spectrum signal, comprising:

a pseudo random (PN) sequence generator for generating a reference code sequence identical to a spreading code sequence potentially contained in a received spread-spectrum signal;

a partial matched filter comprising:

(a) a plurality of tap delay elements, each tap delay element for providing a delay of one time period and outputting one sample of the input signal,

(b) a plurality of multipliers wherein the first multiplier receives the input signal and one chip of the reference code further wherein each subsequent multiplier receives an output of a tap delay element and one respective chip of the reference code, and

(c) an adder circuit for summing the outputs of each multiplier producing a first correlation value;

an integrator receiving the first correlation value for integrating the first correlation value over a plurality of time periods when the first correlation equals or exceeds a first threshold, to generate a second correlation value; and

a decision circuit for comparing the second correlation value with a second threshold and generating a positive search result if the second correlation value equals or exceeds the second threshold.

18. The spread-spectrum sliding matched-filter searcher system as in claim 17, wherein the reference code sequence moves at the same speed and in the same logical direction as the received spread-spectrum signal when the second correlation value does not equal or exceed the respective threshold to facilitate the integration.

19. The spread-spectrum filter searcher system as in claim 17, wherein the partial matched filter comprises a tap delay line having a length smaller than that a full matched filter length.

20. A method for finding a multi-path signal from a received spread-spectrum signal, comprising:

(a) receiving an input multipath signal comprising a spread spectrum signal having a spreading code sequence and an information signal;

(b) matched-filtering a predetermined number of samples of the input signal with a window of a reference code producing a first correlation value;

(c) comparing the first correlation value to a first threshold;

(d) when the first correlation value equals or exceeds the first threshold, integrating the first correlation value over time equal to the size of the window to produce a second correlation value;

(e) comparing the second correlation value with a second threshold; and

(f) indicating a detection of a multi-path signal when the second correlation value equals or exceeds the second threshold.

21. The method of claim 20, wherein the partial matched-filtering step comprises:

(b)(1) generating a local reference code sequence signal;

(b)(2) applying the input signal to a plurality of tap delays elements;

(b)(3) multiplying a current value of the input signal and each output of the tap delay elements by at least one respective chip of the reference code, respectively; and

(b)(4) summing the products of step (b)(3) to produce the first correlation signal.

22. The method of claim 21, wherein the integration comprises:

(d)(1) freezing the reference code;

(d)(2) receiving new samples of the input signal;

(d)(3) matching the product of step (d)(1) and (d)(2) to produce a new first correlation value;

(d)(4) moving the reference code and the input signal and integrating the new first correlation value over time equal to the predetermined time period to produce a second correlation value; and

(d)(5) repeating steps (d)(1) - (d)(4) by freezing the local PN sequence generator and resetting the integration to zero, after a predetermined number of chips when either the second correlation value meets the second threshold or the second correlation value does not meet the second threshold over an extended time period.